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Building Blocks of Europe's Single Market

by F. ABRAHAM*

I. INTRODUCTION

The European Community today is facing exciting opportunities and challenging problems. The twin conferences on monetary and political union envision a degree of European integration never aspired before. While the Community is still adjusting to German reunifaction, several non-member countries expressed interest in future membership. At the same time, the EC plays a leading role in the transformation of Eastern Europe. By the end of this decade, the Community and the whole of Europe will have changed fundamentally, provided that world conflicts or an economic recession do not reverse the current momentum towards integration.

With all these new developments, it does not come as a surprise that attention gradually moved away from the completion of the internal market, the so-called "1992 program". This does not imply that no progress is being made in this domain. Quite on the contrary, the creation of the internal market is a success. On November 15, 1990 almost two thirds of the 1992 directives were approved by the Council of Ministers. With the exceptions of fiscal harmonization and free movement of individuals, breakthroughs were realized in virtually every important area of liberalization. Most observers would credit the liberalization program for at least part of the remarkable economic expansion in Europe during the last couple of years.

* Centrum voor Economische Studiën, K.U.Leuven.
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One main contributing factor to the success of the 1992 program are the powerful yet simple principles underlying the liberalization. More specifically, the removal of internal barriers in the industrial sector is based on mutual recognition. This principle establishes that, once a product meets the standards of one EC country, it cannot be denied access to another market. The very similar idea of home country control lies at the heart of the liberalization of the financial sector within the EC. Home country control means that a financial company can conduct its activities in all EC countries provided that it is approved by the authorities of its country of origin.

Home country control and mutual recognition have in common that a supplier is granted access to a foreign market based on the standards and regulations of its own country. This reflects a radical departure from the situation previously existing within the EC as well as from current practices in international trade. The application of these principles is limited only by essential EC requirements specifying minimum conditions for national standards throughout the Community.

This paper deals with theory and facts about home country control, mutual recognition and essential requirements. Section II discusses how the mentioned principles have been applied to the industrial and financial sector. In Section III, we consider the role of the liberalization principles in eliminating what Winters (1990) defines as cost-increasing frictions on inter-member flows. In this interpretation, national standards and regulations increase costs of foreign firms and thus protect domestic companies against competition from other EC countries. Section IV takes the alternative view that standards and regulations guarantee a minimum quality level of the products and companies admitted to the domestic market. They can therefore be used by companies to establish a quality reputation. In a final section, some concluding comments are made.

II. INSTITUTIONAL AND LEGAL ASPECTS

A. *Mutual Recognition of Technical, Environmental and Health Standards*

Many of the directives of the 1992 program are aimed at removing national technical, environmental and health standards that form an impediment to free trade among EC countries. To achieve this objective, the principle of mutual recognition was adopted in most of

the directives. This principle guarantees that when, say, a pharmaceutical product is approved in Spain, it can also be sold in Germany even if it does not meet German standards. By now, this principle has found a wide range of important applications. To mention just a few, the suppliers of telecommunication equipment and electronics are no longer required to adjust to the standards of each individual EC country and pharmaceutical companies avoid costly delays arising from getting the same drug approved in different markets.

The basis for mutual recognition stems from two important rulings by the European Court of Justice. In the "Cassis de Dijon" case of 1979, French exporters attacked German health regulations on food products which effectively banned the sale of cassis on the German market. The European Court ruled that technical and commercial regulations may not give rise to trade barriers unless they are necessary for safeguarding a particular public interest.

The decision in the case of "The German Beer Purity Law" or "Reinheitsgebot" (1987) greatly strengthened the power of the mutual recognition principle in real world applications. German regulations ruled out the sale of foreign beer in Germany on the ground that it contained hazardous chemicals. The European Court judged that member states cannot invoke public health considerations to justify measures that act as import restrictions unless they can objectively prove that the product is harmful to health. Important is that the burden of proof is unambiguously placed on the importing member state which has to present compelling reasons for maintaining trade restricting standards.

The extension of mutual recognition to environmental considerations is not settled yet as is exemplified by the ruling on the "Danish compulsory bottle deposit". Denmark introduced a law in 1981 which required that beer and soft drinks be sold only in returnable bottles, with a compulsory deposit. Brewers from other countries protested because the costs of recycling bottles reduced profits. The European Commission took the case to court arguing that the Danes were imposing a disproportionate level of environmental protection. In September 1988, the court backed Denmark invoking the environmental provisions of the Single European Act.

B. *Home Country Control*

The liberalization of financial markets within the EC is based on the principle of home country control. Earlier, we defined home country control as the right of a financial company to operate in all EC countries provided that it is approved by the authorities of its country of origin. For example, a British bank, which is approved by the British regulatory authorities, does not have to meet German or French standards if it wants to operate in Germany or France. The home country principle constitutes a marked step towards liberalization when compared to the prevailing system of host country control. With host country control financial institutions have to conform to the standards of each of the countries where they sell their products. In the previous example, the British bank needs approval of the German and French authorities in order to market its products in Germany and France.

While representing substantial progress towards an internal market, the home country control principle is applied quite differently in various parts of the financial sector. In what follows, we consider the cases of the banking and insurance sector.

Without any doubt, the adoption of the second banking directive represents a major breakthrough in the creation of a fully integrated financial market. This directive establishes the principle of a single banking licence for an extensive list of banking activities including all forms of transaction in securities. It couples this licence to the home country control principle. In effect, the banking licence is granted by the home country of the bank according to the laws and regulations prevailing there, provided that these laws at least meet EC essential standards. Supervision of the bank is also the responsibility of the home country authority. There are some exceptions to this principle: host control continues to apply for the supervision of liquidity, administrative and accounting procedures. Host country governments would also remain responsible for monetary policy. At this stage, it is too early to say to what degree these exceptions weaken the principle of home country control.

The insurance business consists of two main branches: "life" and "non-life" insurance. The liberalization in the European insurance sector is well under way. However, the application of the home country principle is restricted in some important ways.

The Second Non-Life Insurance Coordination Directive, adopted in 1988, gives insurance companies the freedom to provide services

to cover "large risks" in other member states without being established there, on the basis of home country control. Large risks are primarily incurred by companies. In effect, the directive defines large risks in terms of total employment, turnover and balance sheet of the client company.

Unlike the banking directive, there is therefore a clear limit on the applicability of home country control. Mass risks, which are incurred by individual persons, are not covered. This distinction follows a Court ruling of December 4, 1986 and is based on the idea that clients for large risk insurance are able to form their own opinion about the company offering the policy and do not require special protection from the supervisory authority in the state where the risk is situated. In spite of this court ruling, the Commission recently proposed a third non-life insurance directive. This directive would extend the home country control principle to small risks.

The second life insurance directive establishes a restricted version of the home country principle in the area of life insurance and is perhaps better interpreted as a combination of home and host country rule. When the insurance taker, on his own initiative, contacts a foreign insurance company that is not established in his country of residence, the insurance contract is subject to the laws of the home country of the insurance company. On the other hand, the contract falls under the national legislation of the insurance taker when the foreign insurance company "actively" seeks to sell its insurance policies outside its home market.

This arrangement hopes to establish the opportunity for insurance takers to obtain the most interesting insurance policies available on the EC market, while at the same time protecting consumers against aggressive marketing strategies of foreign insurance companies. Nevertheless, the restrictions on market penetration by foreign companies run the risk of protecting the market power of domestic companies on their home market. Moreover, the distinction between the initiative of the insurer and the insured is not easily made and is complicated further by the fact that independent insurance brokers are allowed to intermediate between consumers and non-resident foreign insurance companies.

C. *Essential Requirements*

The principles of mutual recognition and home country control are supplemented by EC essential requirements that are laid down in EC directives. Those directives specify minima to which the national standards and regulations of all Community countries have to conform. Individual member countries are left free to impose tougher standards but cannot refuse market access to products that satisfy EC essential requirements.

In the area of technical, safety and pollution standards, specialized European agencies, (e.g. CEN, CENELEC and ETSI), in which national certification institutions are represented, determine the technical specifications that have to be satisfied to meet EC essential requirements. Ultimately, companies can choose between European or national certification provided that national standards comply with EC standards.

EC essential requirements for the financial sector guarantee the solidity of financial institutions active on the European market and facilitate the harmonization of ground rules across member states.

By now, a wide range of essential requirements have been approved for banks, insurance companies, investment firms, capital and stock markets. A detailed description can be found in Abraham (1990a) but three examples for the banking sector convey the general picture.

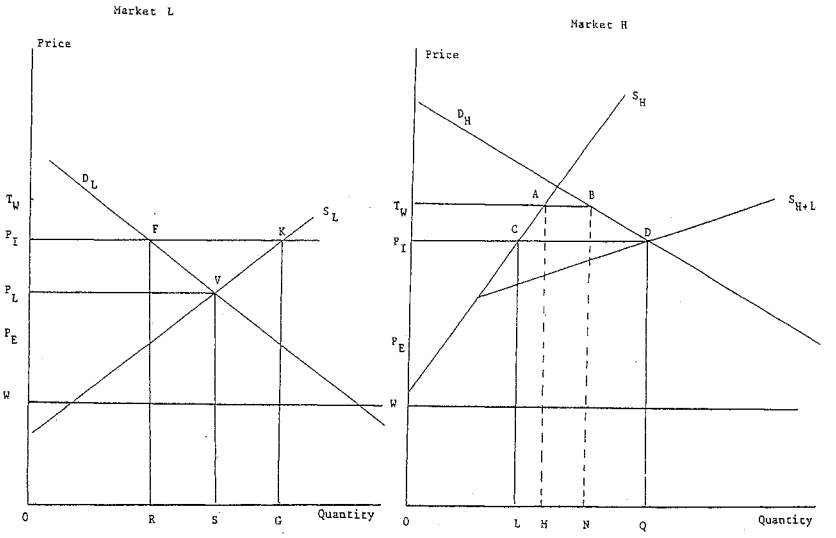
To obtain the banking passport required to benefit from home country control, initial bank capital should account for at least 5 million ECU. Banks are obliged to respect the EC directive on own funds of credit institutions which defines internal and external elements of own funds and specifies that external elements should comprise no more than 50% of total own funds. They are also subject to the directive on a minimum solvability ratio. This directive determines that a credit institution's own funds should represent a minimum of 8% of all its risk-adjusted assets. In assigning risk weights to a bank's assets, a distinction between Community and non-EC borrowers is made as well as between public, semi-public and private borrowers. All these requirements closely follow the international standards set out by the Bank for International Settlements.

The concept of essential requirements has become a cornerstone of Community legislative thinking and is gradually extended towards new areas of EC regulation. The social domain provides a good example in this respect. Following a consensus on a charter of social rights,

the Commission recently proposed minimum requirements for part-time, shift and night work as well as on minimum rest periods and paid annual holiday.

FIGURE 1

The Creation of an Internal Market: Cost-Increasing Barriers



III. ECONOMIC INTEGRATION, MARKET SEGMENTATION AND COST COMPETITIVENESS

In this section, we analyze the economic effects of mutual recognition and home country control when national standards and regulations impose adjustment costs on foreign firms. We first show that different national standards and regulations lead to market segmentation. Subsequently, we argue that mutual recognition and home country control eliminate this type of market segmentation and benefits companies with a cost advantage. Finally, we analyze the role of essential requirements.

Throughout the analysis a graphical framework, adapted from custom union theory (Robson (1987)), is used as a stylized description of a complex European marketplace[1]. In Figure 1, we consider the perfectly competitive markets in two EC countries for a particular

good. Firms producing in country L are assumed to have a cost advantage over their competitors in country H. For example, the low-cost country L might be Spain where, due to lower labor costs, cars or television sets can be assembled cheaper than in a high labor cost country like Belgium. We suppose that the product is homogeneous: there are no quality differences between television sets produced in Spain and Belgium.

Evidently, firms of country H and L are also competing with non-EC companies. In Figure 1, we assume that these producers are willing to supply an infinite amount at the world price OW.[2] To protect European producers against world competition, the EC imposes an external tariff of WTw on imports, which raise the price of non-EC products on the European market to OTw.

Companies in country L want to exploit their cost advantage and export to country H. But they face adjustment costs arising from technical, health and environmental standards or from a different regulatory environment. In effect, the absence of mutual recognition and/or home-country control imposes a cost of TwPE per unit of output to adjust to the standards of country H. In our example of television sets, there are about six different national television reception standards in the EC. Adjusting to these standards renders penetration of national markets less profitable. Exporting firms therefore view standards and regulations as cost increasing entry barriers.

A. *Internal Barriers and Market Segmentation*

Different standards profoundly affect the decision of low cost producers to sell only on their home market L or to serve both markets. Consider the situation in market L first with domestic demand curve DL and industry supply curve SL. Equilibrium between supply and domestic demand occurs at V with price OPL and sales OS. Hence, EC firms receive OPL when they sell in market L.

In market H the demand curve is given by DH. The industry supply curve of domestic firms is given by SH. Non-EC competitors are willing to satisfy total demand at the price OTw. Therefore, the price in country H cannot exceed OTw. Suppose this maximum price OTw were the equilibrium price. The net price for exporters of country L after subtracting the adjustment cost TwPE is OPE, which is less than the price they would receive in market L. Therefore, they choose to

TABEL 1

Automobile prices net of taxes in the E.C. countries in 1986, 1987 and 1989. The cheapest country equals a value of 100 (1)

Country	1986	1987	1989
Belgium	121	121	123
West Germany	129	128	137
Denmark	100	100	100
Spain	146	142	149
Ireland	151	130	145
France	130	128	132
Italy	144	129	148
Luxembourg	122	122	127
Netherlansd	123	122	130
Portugal	136	127	140
U.K.	151	144	161
Greece	(2)	(2)	107

Source: Van Neder and Vanhaverbeke (1990)
(1): Figure for 1988 are not available
(2): No figures available for Greece in 1986 and 1987.

not to export and to sell their entire production in market L. Hence, the equilibrium in country L is found at point V.

With no exports from country L, the maximum price OTw becomes the equilibrium price in market H. Total demand is found at point B and is equal to ON. Home firms produce a part OM of total demand (see point A on the domestic supply function). The difference between domestic demand and supply (that is AB = MN) is imported from non-EC exporters.

This graphical derivation indicates how different standards and regulations constitute one important reason for market segmentation.[3] Firms treat countries as separate entitities and fail to fully base their strategies on the interdependencies between the markets. Market segmentation is reflected in the two following features often observed on European markets.

There is price discrimination for the same product across markets. In Figure 1, the price OTw in market H is higher than the price OPL in market L. As a real world example, Table 1 compares average car prices net of taxes in the EC (The country with the lowest car prices, expressed in ECU, is given a value of 100). The table reveals that there was a net of tax price average price differential of 44% to 61% in the

period 1986-1989 between the most expensive country, the United Kingdom, and Denmark, the country with the lowest car prices. More detailed data on individual models, found in Van Neder and Vanhaverbeke (1990 (Appendix 1)) as well as earlier work by Mertens and Ginsburgh (1985) reveal a similar picture.

Price discrimination is not confined to the automobile industry. The report on 1992 by the Commission of the European Communities (1988) provides evidence of price dispersion in important sectors as electronics, telecommunications and steel. The data for the financial sector are reproduced in Table 2. The figures represent the percentage differences in prices of financial products compared with the average of the four lowest observations.[4] We observe sharp price differentials for comparable banking and insurance products across EC countries.

The other characteristic of market segmentation is the protection offered by national standards and regulations to domestic producers. This is reflected in artificially high market shares of domestic firms on their home market. Again the examples of the automobile and the financial sectors are insightful. Table 3 presents the market share of selected car manufacturers on four EC markets in 1988. For French, Italian and British automobile producers in particular, the position on the home market is significantly stronger that on foreign markets. Table 4 shows the market shares of domestic banks and life-insurance companies on their home market. With the exceptions of Belgium, Luxembourg and the United Kingdom, the EC banking market is dominated by domestic banks. The domestic orientation of life-insurance companies is even more outspoken.

B. *The Effects of Mutual Recognition and Home Country Control*

Now assume that mutual recognition or home country control is introduced. Companies based in country L can operate in market H without adjusting to the standards of country H. Television sets or pharmaceuticals approved in Spain can be sold everywhere in the EC. A French bank, supervised by the French authorities, can carry out the activities included in the banking passport in all EC countries. In Figure 1, foreign firms selling in market H do not longer incur the adjustment cost TwPE.

This liberalization profoundly alters market conditions within the EC in four fundamental ways.

TABLE 2

Price differentials in EC banking and insurance (Percentage differences in prices of financial products compared with the average of the four lowest observations)

	B	D	E	F	I	L	NL	UK
Banking								
Consumer credit	-41	136	39	105	n.a.	26	31	121
Credit cards	79	60	26	-30	89	-12	43	16
Mortgages	31	57	118	78	-4	n.a.	-6	-20
Letters of credit	22	-10	59	-7	9	27	17	8
Foreign exchange	6	31	196	56	23	33	-46	16
Travellers cheques	35	-7	30	39	22	-7	33	-7
Commercial loans	-5	6	19	-7	9	6	43	46
Insurance								
Life	78	5	37	33	83	66	-9	-30
Home	-16	3	-4	39	81	57	17	90
Motor	30	15	100	9	148	77	-7	-17
Commercial fire, theft	-9	43	24	153	245	-15	-1	-27
Public liability	13	47	60	117	77	9	-16	-7

Source: Commission of the European Communities (1988).

TABLE 3

Market shares (in %) of selected EC automobile producers (1)

Germany	France	Italy	United Kingdom	West
Austin	2.0	1.4	15.8	0.4
Alfa Romeo	0.9	6.1	0.1	0.2
BMW	1.6	1.1	1.9	5.2
Citroën	11.7	3.2	1.8	1.7
Fiat	5.0	44.8	3.3	4.4
Ford	6.9	3.8	27.4	10.5
Mercedes	1.2	1.2	1.1	10.7
Opel	4.8	3.2	15.1	14.9
Peugeot	20.4	3.6	4.6	3.1
Renault	31.6	8.7	3.7	3.1
Volkswagen	6.0	7.1	5.8	28.6
Volvo	1.0	0.9	3.7	0.6
Other	7.0	14.9	15.8	16.6
TOTAAL	100.0	100.0	100.0	100.0

Source: Van Neder (1989).
(1): The market shares are computed based on sales of selected models.

TABLE 4

Market shares of domestic banks and life-insurance companies

	Banks[1]	Life-insurance companies[2]
Belgium	54	88[3]
Denmark	99	98
France	90	96
Germany	95	97
Greece	n.a.	84[4]
Ireland	89	65
Italy	97	96
Luxembourg	9	883
Netherlands	90	95
Portugal	97	n.a.
Spain	89	n.a.
United Kingdom	38	89

Source: Gilibert and Steinherr (1989).
1. % share of domestic banks in total assets at the end of 1987 (end of 1986 for Ireland).
2. % of premium accounted for by domestic insurance companies around 1980.
3. The figure applies to Belgium and Luxembourg combined.
4. The figure for Greece includes non-life insurance.

Firstly, the scope for price discrimination in products with the same quality is reduced. Sales are continuously readjusted between markets in order to get the highest possible price. In our example of complete liberalization, price differences between markets disappear. In the new equilibrium, there is one price in two markets.

To determine this equilibrium price we have to construct the new supply curve in country H. For prices above PL, firms selling in market L are willing to export to country H the difference between their supply and total demand in country L.[5] Adding those exports to total domestic production in country H yields the new supply curve SH + L. The new equilibrium is found at point D where demand meets supply in market H. The equilibrium price in both countries becomes OPI. The price increase in market L causes sales to fall from OS to OR. Conversely, in market H prices fall and consumption increases to OQ.

Secondly, cost leadership plays an essential role in determining competitive advantage in an integrated market. High cost firms lose the artificial protection from the differential in national standards. In Figure 1, home firms in market H face a decline in sales from OM to OL and will be forced to rationalise. Firms previously selling exclusively in market L expand their total production from OS to OG.

Thirdly, trade diversion occurs. Exporting firms located outside the EC sold MN on market H before the market liberalisation. They loose their market share to firms located in the EC. Note that is true even if the level of protection (WTw in Figure 1) remains the same. Non-EC exporters loose even more if the EC uses the 1992 project to raise the level of protection. On the other hand, non-EC firms already located in the EC should enjoy the same benefits as EC firms. These facts explain the fear of the major EC trading partners for a "fortress Europe" as well as the current surge of non-EC direct investment in the Community.

Finally, home country control and mutual recognition are likely to lead to a competition of rules: national regulations will start to compete. Stricter national rules will be under pressure to change because they do not apply to foreign companies. If, say, Italian banks are subject to very strict capital adequacy requirements, they are put at a competitive disadvantage with respect to banks from EC countries with lower standards and may even decide to move elsewhere.

C. *The Economics of Essential Requirements*

Competition of rules is beneficial when indefensible standards and superfluous regulation are eliminated. Yet, such competition runs the risk of an ultimate convergence towards the lowest possible standard in the Community[6]. For instance, companies may prefer to conform to Greek environmental standards and drug testing procedures instead of complying with tougher standards at home.

The specification of EC essential requirements is widely recognized as an effective counterweight for this process of downward harmonization. What is not commonly realized, however, is that essential requirements may fundamentally affect the competitive positions of firms within an industry.

Imagine in our graphical framework that EC essential requirements are based on the standards of country H. Companies in country L now incur adjustment costs to adapt their products to EC standards. These adjustment costs also apply to products sold on their home market. As a result, supply curves SL and SH + L shift upwards in Figure 1 (not shown). Country L's companies loose (part of) the gains in market share in country H, derived from the implementation of mutual recognition or home country control.

The competitive impact of essential requirements explains the intensive lobbying efforts of companies at the European Commission headquarters in Brussels. Having incurred the sunk cost of adjusting to French standards, it matters for a French producer of precision instruments that the standard of its German competitor does not become the EC-wide norm.

A similar reasoning applies to the debate on Europe's social dimension (Abraham (1990b)). Employers in the Southern EC countries do not benefit from EC social minimum requirements based on social norms in the Northern countries. Such measures raise their labor costs and put them at a disadvantage w.r.t. their Northern competitors.

IV. MARKET INTEGRATION, QUALITY COMPETITION AND REPUTATION

So far, we assumed that all products are homogeneous and thus of the same quality. Standards, regulations and possibly minimum requirements merely raise costs for otherwise cost-effective firms. In reality, products are often differentiated by quality: several brands of the same industrial or financial product are available on the market with quite distinct quality characteristics[7]. Consumers are willing to pay a price for these perceived or real differences in quality. In other words, they are often prepared to pay a reputation premium for e.g. a Japanese or a German car or a well-known electronics brand name. In the financial sector, corporate or private customers may go for a well-established French bank even if an lesser known Greek institution offers a better deal.

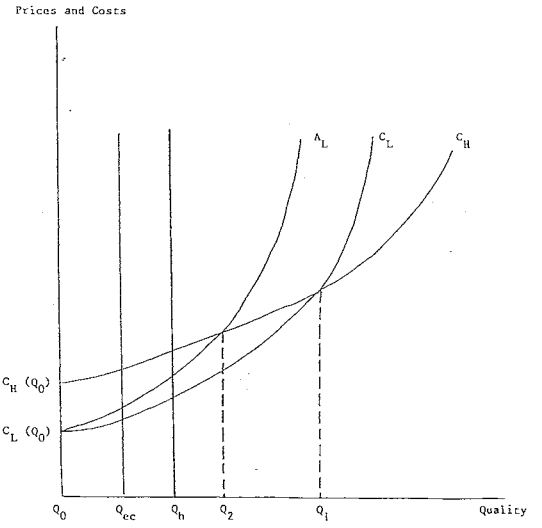
Strict national standards and uncompromising domestic regulations are one possible way of establishing a quality reputation. High domestic capital adequacy and reserve requirements help to establish the credit-worthiness of financial institutions. Obtaining a banking licence from the French authorities may instil more confidence than a Greek banking passport. Satisfying German standards for machinery is perhaps costly but signals quality to potential customers.

A. *National Standards and Regulations as Quality Indicators*

A very different view on standards and regulation emerges from these examples. Strict requirements are no longer merely cost enhancing

FIGURE 2

Standards and Regulations as Quality Indicators



but are used by firms to differentiate their products from their competitors. In this section, we analyze the effects of home country control, mutual recognition and essential requirements in a framework of quality differentiation.

We return to a two-country, one product framework in Figure 2, which is based on Falvey (1989). A range of different varieties of the product now exists as measured on the vertical axis. The lowest available quality of the product, Qo, is depicted at the origin. The horizontal axis shows average production costs of companies in countries H and L for the various brands on the market. The CL and CH curves indicate that unit production costs increase when the quality of the product improves.

Country H and L possess different competitive strengths. Firms of country L are more efficient in producing the lower quality variety of the product, while country H derives its comparative advantage from specialization in higher quality goods. In effect, unit costs are lower in country L than in country H for brands in the range QoQ1 but higher when the quality level of the product exceeds Q1. For instance, country L could be Portugal exploiting its labor cost advantage to cheaply produce standard household appliances. The higher quality

products are less costly to manufacture in Germany (country H) because they require sophisticated technology and skilled manpower.

Consider the situation before mutual recognition or home country control. The authorities of country L judge that all available brands are of sufficient quality to be sold on their market. In country H all quality levels below Qh are deemed unacceptable and excluded from the market. This scenario fits in well with the generally tougher safety, health and environmental standards in Germany than in Portugal. Quite likely, a comparison of regulation in the financial sector would reveal a similar picture.

The regulatory bodies of country H submit domestic and foreign products to the same quality test. After passing the test, foreign products are admitted to market H without further adjustment costs. Hence, we abstract entirely from the type of adjustment costs for exporters analyzed in Section II.

To keep things simple, we suppose that the tests fully reveal the quality of the products to potential buyers. Said differently, buyers accept the label "approved in Germany" as sufficient proof for the quality claims made by the seller. The analysis is easily extended to the case where suppliers face additional costs in order to convince customers of their product's quality (Falvey (1989)).

With this assumption as well as free entry in the industry, prices are equal to average costs and are measured on the vertical axis. Higher quality goods carry a higher price. For the same quality, buyers prefer the cheapest product. Firms from country L will therefore sell the lower quality range QoQ1 in their domestic market. Since quality levels below Qh are barred from market H, their sales in country H are confined to the range QhQ1. Suppliers from country H capture the high quality market segment in both countries with quality levels above Q1.

B. *The Effects of Mutual Recognition and Home Country Control*

With mutual recognition and home country control, product varieties of country L are no longer obliged to undergo country H's quality tests in order to be sold on market H. Moreover, varieties with a quality less than Qh cannot be refused access to market H. How do these changes alter the specialization pattern?

It is immediately clear that producers in country L of quality levels below qh benefit because they obtain access to market H. Lower qua-

lity Portuguese appliances appear on the German market which also benefits German consumers who could afford more expensive sophisticated brands.

On the other hand, firms of country L run the risk of being confronted with a reputation problem. In a less regulated environment, it becomes more difficult for economic agents to judge the quality of the goods and services available. In particular, consumers in country H may doubt the quality of country L's products because of the lower quality of the varieties that were previously barred from market H. This doubt would only be reinforced if country L's higher quality products do no longer submit to country H quality testing or regulations. In our example, German consumers may increasingly view Portuguese appliances as lower quality products and turn to well-established German brands instead. They may be unwilling to deposit funds in a Portuguese bank that is supervised by Portuguese rather than German banking authorities.

To convince buyers of product quality, country L's companies will be forced to invest in reputation building e.g. by advertising, extra warranties or improved after-sale service. The AL curve in Figure 2 depicts unit costs for country L suppliers taking into account expenditures on reputation building. The distance between CL and AL reflects this reputation cost which is assumed to be larger for higher quality varieties of the product.

The reputation cost raises the price of country L's products. In the new equilibrium, firms from country L produce the quality range QoQ2. Consequently, they loose their competitive advantage in the Q2Q1 part of the product range. Another way of saying this is that the firms of country H benefit from the quality reputation of their products[8]. In short, investments in reputation pay off in an integrating European market.

A downward convergence of standards towards the lowest standard in the EC will not take place. On the contrary, firms of country H build part of their quality reputation on the country's stricter standards and regulations. Likewise, firms of country L producing varieties in the range QhQ1 may wish to conform to country H's rather than country L's standards, even if this implies supplementary adjustments costs. When meeting German standards sends a signal of quality to potential buyers, Portuguese companies have an incentive to have their product approved in Germany. In Figure 2, such strategy allows country L's firms to lower their reputation cost. The AL curve

shifts back towards CL and country L's firms capture a larger interval of the quality range.

C. *Essential Requirements and Quality Competition.*

This interpretation of standards and regulations as quality signals throws an interesting light on the role of EC essential requirements. In Figure 2, the minimum quality level allowed in the EC is determined at Qec. Hence, EC requirements are stricter than country L's standards but less restrictive that country H's regulations. The competitive impact of EC essential requirements varies considerably depending on the quality characteristics of the variety considered.

Country L producers of varieties with a quality below Qec are worse off than in any of the other systems discussed so far. As in the equilibrium without mutual recognition or home country control, they are barred from market H. In addition, they are denied the opportunity to sell in their home market whereas they did not face any quality restrictions before.

Suppliers from country L of goods in the quality range QecQh advocate essential requirements. EC norms allow them to sell in all countries of the EC. At the same time, the label "approved in the EC" may enhance their products' reputation and therefore strengthen their competitive position.

The evaluation by other firms, with quality levels above Qh, depends on the reputational value of the EC requirements. Suppose that consumers judge that the less restrictive Community standards are sufficiently reliable in measuring quality. In that case, firms in both countries will conform to EC standards if doing so is less costly than adjusting to the tougher German regulations. In the end, we will observe an convergence of national standards towards the Community norm comparable to the process described for cost-increasing internal barriers. Conversely, firms will stick to the German norm if consumers do not accept EC approval as a quality indicator. Under those conditions, no harmonization based on EC norms is likely to occur. Instead, EC essential requirements and (a couple of) stricter national standards will coexist, the latter reflecting quality judgments by consumers.

V. CONCLUSION

This paper focused on three fundamental principles in the creation of a European single market. By now, the idea of accepting the norms of the country of origin, as exemplified in the mutual recognition and home country control principles, has gained widespread acceptance. Likewise, the responsibility of the Community in specifying essential requirements does not seem to be contested. In spite of this, a comparison of the banking and insurance sector indicates that the degree of liberalization varies considerably across sectors.

National standards and regulations impose adjustment costs on firms attempting to penetrate new markets. Mutual recognition and home country control enable cost-efficient firms to circumvent the artificial protection offered by cross-country differences in cost-increasing norms. Prices of comparable goods converge across markets. Companies with a cost advantage expand their market share. In an integrating market cost competitiveness plays an increasing role, which explains the cost restructuring taking place in many companies in anticipation of 1992.

If meeting strict national standards norms is interpreted by consumers as proof of product quality, the impact of mutual recognition, home country control and essential requirements on business strategy is complex. Suppliers of the lowest quality varieties face the choice of either upgrading their product to meet EC essential requirements or being excluded from all EC markets. Products of lower quality that meet EC standards obtain access to the entire Community market. The companies involved also benefit from a reputation effect if EC regulations are better trusted by consumers than the standards of their country of origin. Higher quality firms from countries with poor standards suffer when consumers find it more difficult to evaluate the quality of the wider product choice available in a less regulated single European market. Uncertain buyers turn to well established brands with an excellent quality reputation. In an integrated market, reputation is therefore likely to matter increasingly for the upper end of the quality range.

This papers conveys the message that companies must carefully take into consideration both cost and reputational aspects of conforming to a specific standard or regulation. They should realize that differences in cost-increasing national standards will be phased out by EC essential requirements. They should keep informed about the

exact specification of the relevant Community minimum norms. Finally, they have to decide whether the competitive edge obtained from a better quality reputation justifies meeting national regulations that are stricter than EC essential requirements. If so, a convergence of all national regulations towards the EC minimum requirements will not be observed.

NOTES

1. A mathematical frameword, including various models of imperfect competition, is found in Venables (1990) among others.
2. With this assumption, terms-of-trade effects are ruled out.
3. We do not mean to imply that market segmentation, price discrimination or a high domestic market share of domestic firms are caused solely by cross-country differences in standards and regulations.
4. For instance, a figure of -41 for consumer credit in Belgium indicates that this product is 41% below the average of the four countries with the cheapest prices for consumer credit.
5. The assumption of perfect competition rules out two-ways trade.
6. Van Cayseele and Heremans (1991) show that downward harmonization is one possible outcome of a regulation game.
7. There are many other reasons for product differentiation not related to quality. Nor is our approach to modeling quality and information the only possible one. In particular, we simplyfy a complex informational problem by assuming that quality differences are observable. We refer the interested reader to the Falvey article.
8. In Figure 2, it is assumed that the reputation cost for firms in country H is zero, so that prices are still determined on the CH curve. An AH curve incoporating reputation costs for country H can be constructed and the new equilibrium determined at the intersection of the AL and AH curves. Under the assumption that country H enjoys a better quality reputation, similar effects as discussed in the text are obtained.

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